

Claims

1. A member for percussive rock drilling where flushing water is used, comprising  
5 sections with reduced thickness of the material, at least one thread (16;16'), said  
thread (16;16') comprising thread flanks (21,22) and thread bottoms (23) provided  
between flanks and thread crests (24), said member (19,26) consisting of at least  
two different materials,

10 characterized in that the member is performed in a compound component  
(15) and in that the thread bottoms (23) consist of stainless steel, the thread crests  
(24) of low alloyed steel and in that the compound component comprises a flush  
channel (20;20').

15 2. The member according to claim 1, characterized in that the low alloyed  
portion of the thread crest (24) has a thickness (T) and the thread (16;16') a depth  
(D), wherein  $0.1 < T/D < 1$ , preferably  $0.4 < T/D < 0.8$ .

20 3. The member according to claim 2, characterized in that the depth (D) is  
1-4 mm and the thickness (T) 1-2 mm, preferably about 1.5 mm.

4. The member according to claim 2, characterized in that a thread bottom  
(23) of the thread (16;16') has a first width, W1, and a thread crest (24) has a second  
width, W2, where the ratio W1/W2 is 0 - 0.9, preferably 0.3 - 0.8.

25 5. The member according to claim 1, characterized in that the stainless steel  
(17;17') has a composition which gives a PRE value  $> 10$ , preferably 12 - 17 and in  
that the low alloyed steel (18;18') has a hardness  $> 500$  Vickers, most preferably 650-  
800 Vickers.

30 6. The member according to claim 5, characterized in that the low alloyed  
steel has the composition in weight%

C 0.1-0.7

Si	0.1-1
Mn	0.2-2
Cr	<5
Ni	<5
5 Mo	<2

the rest being Fe and inevitable impurities.

7. The member according to claim 1, characterized in that the member (19;26) comprises a core (17;17') and a shell (18;18'), wherein anyone of the core and the shell consists of stainless steel while the other consists of low alloyed steel.

8. The member according to claim 1, characterized in that the member (19;26) is firmly connected to an end of a rod or a tube of low alloyed or stainless steel and forms a drill rod (25) and in that the drill rod comprises a through flush channel (20;20').

9. A method for manufacturing a drill member for percussive rock drilling, said member comprising sections with reduced thickness of the material, at least one thread (16;16'), said thread (16;16') comprising thread flanks (21,22) and thread bottoms (23) and thread crests (24) provided between the flanks, said members (19;26) consisting of at least two different materials, characterized in that the method comprises the following steps:

- providing a core (17;17') and a shell (18;18'), wherein anyone of the core and the shell consists of stainless steel while the other consists of low alloyed steel,
- 25 - fitting the core (17;17') into the shell (18;18') with close fit in order to create a blank (13),
- welding the ends of the blank (13) in order to fix the core relative to the shell,
- extruding the blank (13) in hot condition to a compound component (15) and
- turning a thread (16;16') for percussive rock drilling from the compound component
- 30 (15) or a portion thereof, preferably such that thread bottoms (23) are obtained in stainless steel.

10. The method according to claim 9, characterized in that the method comprises the following further step:

- friction welding the compound component or a portion thereof to a drill rod (25) of low alloyed or stainless steel.